

ABSTRACT OF THE DISCLOSURE

A process for making an integrated circuit is described wherein sequence of mask steps is applied to a substrate or epitaxial layer of p-type material. The sequence consists of the following steps:

- 5 (1) applying a first mask and forming at least one N-well in said p-type material therethrough;
- (2) applying a second mask and forming an active region therethrough;
- (3) applying a third mask and forming a p-type field region therethrough;
- (4) applying a fourth mask and forming a gate oxide therethrough;
- 10 (5) applying a fifth mask and carrying out a p-type implantation therethrough;
- (6) applying a sixth mask and forming polysilicon gate regions therethrough;
- (7) applying a seventh mask and forming a p-base region therethrough;
- 15 (8) applying an eighth mask and forming a N-extended region therethrough;
- (9) applying a ninth mask and forming a p-top region therethrough;
- (10) applying a tenth mask and carrying out an N+ implant therethrough;
- (11) applying an eleventh mask and carrying out a P+ implant
- 20 therethrough;
- (12) applying a twelfth mask and forming contacts therethrough;
- (13) applying a thirteenth mask and depositing a metal layer therethrough;
- (14) applying a fourteenth mask and forming vias therethrough;
- (15) applying a fifteenth mask and depositing a metal layer therethrough;

25 and

 (16) applying a sixteenth mask and forming a passivation layer therethrough. Up to any three of mask steps 4, 7, 8, and 9 may be omitted depending on the type of integrated circuit.